IFW

TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 03830052AA

In Re Application Of: **Murashima**

APR 13 2006
PATENT & TRADEMARK OFFICE

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/531,899	11/531,899	11/15/2005	30743	2654	5822

Title: **METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFOR**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Request for Corrected Filing Receipt
Marked up Filing Receipt
Copy of Declaration and Power of Attorney
Copy of Preliminary Amendment
Postcard

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-2041** as described below.
  - ☐ Charge the amount of
  - ☒ Credit any overpayment.
  - ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Dated: **April 13, 2006**

Signature

Michael E. Whitham
Reg. No. 32,635

Whitham, Curtis, Christofferson & Cook, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190
(703) 787-9400

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on

_____.
(Date)

Signature of Person Mailing Correspondence

Typed or Printed Name of Person Mailing Correspondence

cc:

03830052AA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

A. Murashima	Confirmation No. 5822
Serial No.: 10/531,899	Group Art Unit: 2654
Filed: November 15, 2005	Examiner: Not known

For: **METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFOR**

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

REQUEST FOR CORRECTED FILING RECEIPT

Sir:

The undersigned respectfully requests a corrected filing receipt for the above-identified patent application. In particular, the following are requested:

1 The name of the inventor should be listed as follows:

Atsushi Murashima

2. The title of the application be amended to read:

METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFOR

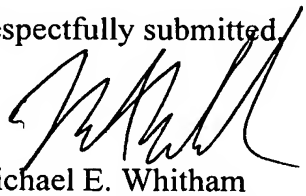
as reflected in the copy of the Preliminary Amendment submitted with the application (copy enclosed for reference);

A copy of the Official Filing Receipt with the corrections highlighted, is also enclosed. Since the inventors name was correctly shown on the Declaration and Power of Attorney, and the Title was clearly amended, issuance of a corrected filing receipt is respectfully requested.

03830052AA

Since these errors were made by the Patent and Trademark Office, no fee is submitted herewith. However, if the Patent Office believes that a fee is in order, please charge any required fees to attorney's Deposit Account No. 50-2041

Respectfully submitted,



Michael E. Whitham
Registration No.: 32,635

Whitham, Curtis, Christofferson & Cook, PC
11491 Sunset Hills Road, Suite 340
Reston, Virginia 20190
703-787-9400

CUSTOMER NUMBER 30743

OIPE IAP68
APR 18 2006
PATENT & TRADEMARK OFFICE

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/531,899	11/15/2005	2654	1030	03830052AA	12	12	3

CONFIRMATION NO. 5822

Michael E Whitham
Whitham curtis & Christofferson
11491 Sunset Hills Road
Suite 340
Reston, VA 20190

FILING RECEIPT

OC000000018199344

MAR 17 2006

Date Mailed: 03/09/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

Applicant(s)

~~Yoshimi Shiramizu, Tokyo~~, JAPAN;
MURASHIMA, ATSUSHI

Power of Attorney:

Charles Whitham--22424
Michael Whitham--32635
Marshall Curtis--33138
Clyde Christofferson--34138

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/13347 10/20/2003

Foreign Applications

JAPAN 2002-307733 10/23/2002

Projected Publication Date: 06/15/2006

Non-Publication Request: No

Early Publication Request: No

Title

~~Code conversion method and device for code conversion~~
METHOD FOR CONVERTING CODE AND CODE CONVERSATION APPARATUS THEREFOR

Preliminary Class

704

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof

unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

OIPE IAP68
APR 19 2006
PATENT & TRADEMARK OFFICE

Combined Declaration and Power of Attorney for Utility or Design Patent Application (37 C.F.R. 1.63)

As a below named inventor, I declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

COPY

This declaration is directed to:

☐The attached application, or
☒was filed on 10/20/2003 as United Stated Application Number or PCT International Application Number PCT/JP03/13347
as amended on 01/21/2004 (if applicable).

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFORE

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 C.F.R. 1.56, including material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the applicaton on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YY)	Priority Not Claimed	Certified Copy Attached Yes	No
307733/2002	Japan	10/23/2002	☐	☐	☒
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

Application Number(s)	Filing Date (MM/DD/YY)

I hereby claim the benefit under 35 U.S.C. 120 of any United States application, or 365(c) of any PCT International application designating the United States of America, listed below and, insofar as the subject

matter of each of the claims of the application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of the application:

U.S. Patent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)
PCT/JP03/013347	20 October 2003	

As a named inventor, I hereby appoint the following registered practioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith:

Name	Registration Number	Name	Registration Number
Michael E. Whitham	32,635	Clyde R. Christofferson	34,138
Marshall M. Curtis	33,138	C. Lamont Whitham	22,424

Direct all correspondence to:

LAW OFFICES
WHITHAM, CURTIS & CHRISTOFFERSON, P.C.
11491 SUNSET HILLS ROAD, SUITE 340
P.O. BOX 9204
RESTON, VIRGINIA 20190
TEL. (703) 391-2510
FAX. (703) 391-9035

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor: YOSHIMI SHIRAMIZU

Given Name (first and middle (if any)) Atsushi Family Name or Surname MURASHIMA

Inventor's Signature Atsushi Murashima Date April 28, 2005

Residence: Tokyo, Japan

Citizenship: Japanese

Mailing Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

OIPE IAP68
APR 19 2006
PATENT & TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

A. MURASHIMA

Serial No.: not yet assigned

Examiner: not yet assigned

Filing Date: concurrently

Group Art Unit: not yet assigned

For: METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFOR

COPY

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

PRELIMINARY AMENDMENT

Sir:

Prior to examination on the merits of this application and prior to calculating the filing fees, please amend the above-identified application as follows:

Amendments to the Title begin on page 2 of this paper;

Amendments to the specification begin on page 3 of this paper.

Amendments to the claims begin on page 6 of this paper.

Remarks begin on page 11 of this paper.

IN THE TITLE:

Please replace the original title with the one noted below:

METHOD FOR CONVERTING CODE AND CODE CONVERSION APPARATUS THEREFOR

IN THE SPECIFICATION:

Please amend the specification as follows:

Please amend pages 14 and 15, paragraph beginning on line 7, page 14:

Fig. 2 is a diagram showing a configuration of a code conversion apparatus according to a first embodiment of the present invention. A code conversion method described below can be realized by the code conversion apparatus shown in Fig. 2. Referring to Fig. 2, the code conversion apparatus according to the first embodiment of the present invention includes an LP coefficients code converting circuit 1100 as a linear prediction coefficients code converting circuit, an LSP-LPC converting circuit 1110, an impulse response calculating circuit 1120, a partial speech decoding circuit 1500, a second excitation signal data generating circuit 2600 as an excitation signal data generating circuit, a second excitation signal data calculating circuit 1610, and a second excitation signal data storage circuit 1620, a code multiplexing circuit ~~20~~ 1020. Here, the same reference number is given to a component which is identical to or similar to the component in the conventional technique shown in Fig. 1. In Fig. 2, an input terminal 10, an output terminal 20, a code demultiplexing circuit 1010, and a code multiplexing circuit 1020 are basically the same as the components shown in Fig. 10 except that a part of the connections are diverged.

Please amend pages 47 and 48, paragraph beginning on line 27, page 47

The optimum ACB gain calculating circuit 2230 receives the first target signal x(n) outputted from the target signal calculating circuit 2210, and receives the filtered past excitation signal $y_d(n)$ with the delay d which is outputted from the ACB encoding circuit 2220. Here, the delay d is the second ACB delay. Next, the optimum ~~ABC~~ ACB gain g_p is calculated from the first target signal x(n) and $y_d(n)$ on the basis of the following equation.

Please amend pages 48 and 49, paragraph beginning on line 21, page 48

The FCB code generating circuit 1300 receives the first target signal, the second ACB signal and the optimum ACB gain outputted from the ACB code generating circuit 2200, and receives the impulse response signal outputted from the impulse response calculating circuit 1120. The FCB code generating circuit 1300 calculates the second target signal by using the first target signal, the second ACB signal, the optimum ACB gain, and the impulse response signal. Next, the FCB code generating circuit 1300 obtains an FCB signal whose deviation from the second target signal takes the minimum value, by using the second target signal, the FCB signal stored in a table built-in the FCB code generating circuit 1300, and the impulse response signal. The code, which is decodable in the second system and corresponds to the FCB signal, is outputted to the code multiplexing circuit 1020 as the second FCB code. The calculated FCB signal is outputted to the gain code generating circuit 1400 and the second excitation signal ~~calculation~~ calculating circuit 1610 as the second FCB signal.

Please amend pages 51 and 52, paragraph beginning on line 20, page 51

The selected FCB signal is used as the second FCB signal c(n). The code, which is decodable in the second system and corresponds to the second FCB signal, is outputted as the second FCB code to the code multiplexing circuit 1020 through an output terminal 55. The second FCB signal is outputted through an output terminal 85 to the gain encoding circuit 1410 in the gain code generating circuit 1400 and the second excitation signal ~~calculation~~ calculating circuit 1610. With regard to the method of expressing the FCB signal, a multi-pulse signal which includes a plurality of pulses and is defined by pulse positions and pulse polarities can be used for

efficiently expressing the FCB signal. In this case, the second FCB code corresponds to the pulse positions and the pulse polarities. As for the details of the encoding when the FCB signal is expressed by the multi-pulses, the description in the section 3.8 of the conventional art document No.3 can be referred to.

Please amend pages 54 and 55, paragraph beginning on line 12, page 54

Fig. 9 is a diagram showing a configuration of the gain code generating circuit 1400. Referring to ~~Fig. 8~~ Fig. 9, the gain code generating circuit 1400 includes a gain encoding circuit 1410 and a gain codebook 1411. The gain encoding circuit 1410 receives through an input terminal 93 the first target signal outputted from the target signal calculating circuit 2210 in the ACB code generating circuit 2200, and receives through an input terminal 92 the second ACB signal outputted from the ACB encoding circuit 2220 in the ACB code generating circuit 2200. Further, the gain encoding circuit 1410 receives through an input terminal 91 the second FCB signal outputted from the FCB encoding circuit 1320 in the FCB code generating circuit 1300, and receives through an input terminal 94 the impulse response signal outputted from the impulse response calculating circuit 1120. The gain encoding circuit 1410 includes a table in which a plurality of ACB gains and a plurality of FCB gains are stored. The gain encoding circuit 1410 reads the ACB gains and the FCB gains from the table sequentially, and calculates sequentially a weighed reconstruction speech by using the second ACB signal, the second FCB signal, the impulse response signal, the ACB gain, and the FCB gain. Also, the gain encoding circuit 1410 sequentially calculates square errors between the weighed reconstruction speeches and the first target signals, and selects an ACB gain and an FCB gain with which the square error takes a minimum value. Here, the square error is expressed by the following equation

IN THE CLAIMS:

Below is a complete listing of the claims with an indication of the status of each. Please amend claims 2, 3, 4, 6, 7, 8, 10, 11, and 12, and add new claims 14-16 as follows:

1. (Cancelled)

2. (Currently Amended) A method of converting code which converts first codes based on a first system to second codes based on a second system, comprising:

obtaining data of first linear prediction coefficients from said first codes;

obtaining data of first excitation signal from said first codes;

storing said data of first linear prediction coefficients;

storing said data of first excitation signal;

calculating current data of first linear prediction coefficients from past data of first linear prediction coefficients which are stored;

calculating current data of first excitation signal from past data of first excitation signal which are stored;

obtaining data of second linear prediction coefficients from said current data of first linear prediction coefficients; and

obtaining data of second excitation signal from said current data of first excitation signal,

wherein when said first codes are unavailable, said second codes are obtained by directly using speech parameters which are ever decoded in accordance with said first system and are stored.

3. (Currently Amended) The method of converting code according to claim 2, further comprising:

generating a first speech signal by driving a filter having any of first linear prediction coefficients derived from said current data of first linear prediction coefficients

and second linear prediction coefficients derived from said data of second linear prediction coefficients by using a first excitation signal derived from said current data of first excitation signal; and

obtaining data of second excitation signal from said first speech signal and any of said first linear prediction coefficients and said second linear prediction coefficients.

4. (Currently Amended) The method of converting code according to claim 2 ~~or~~ 3,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

5. (Cancelled)

6. (Currently Amended) A code conversion apparatus, which converts first codes based on a first system to second codes based on a second system, comprising:

a linear prediction coefficients data decoding circuit configured to obtain data of first linear prediction coefficients from said first codes;

an excitation signal data decoding circuit configured to obtain data of first excitation signal from said first codes;

a linear prediction coefficients data storage circuit configured to store said data of first linear prediction coefficients;

an excitation signal data storage circuit configured to store said data of first excitation signal;

a linear prediction coefficients data calculating circuit configured to calculate current data of first linear prediction coefficients from past data of first linear prediction coefficients which are stored;

an excitation signal data calculating circuit configured to calculate current data of first excitation signal from past data of first excitation signal which are stored;

a linear prediction coefficients data encoding circuit configured to obtain data of second linear prediction coefficients from said current data of first linear prediction coefficients; and

an excitation signal data generating circuit configured to obtain data of second excitation signal from said current data of first excitation signal,

wherein when said first codes are unavailable, said second codes are obtained by directly using speech parameters which are ever decoded in accordance with said first system and are stored.

7. (Currently Amended) The code conversion apparatus according to claim 6, further comprising:

a partial decoding circuit configured to generate a first speech signal by driving a filter having any of first linear prediction coefficients derived from said current data of first linear prediction coefficients and second linear prediction coefficients derived from said data of second linear prediction coefficients by using a first excitation signal derived from said current data of first excitation signal; and

an excitation signal data generating circuit configured to obtain data of second excitation signal from said first speech signal and any of said first linear prediction coefficients and said second linear prediction coefficients.

8. (Currently Amended) The code conversion apparatus according to claim 6 ~~or 7~~,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

9. (Cancelled)

10. (Currently Amended) A computer program product embodied on a computer-readable medium and comprising code that, when executed, ~~A program that~~ causes a computer to perform processes, said computer serving as a code conversion

apparatus which converts first codes based on a first system to second codes based on a second system,

said processes comprising:

a process of obtaining data of first linear prediction coefficients from said first codes;

a process of obtaining data of first excitation signal from said first codes;

a process of storing said data of first linear prediction coefficients;

a process of storing said data of first excitation signal;

a process of calculating current data of first linear prediction coefficients from past data of first linear prediction coefficients which are stored;

a process of calculating current data of first excitation signal from past data of first excitation signal which are stored;

a process of obtaining data of second linear prediction coefficients from said current data of first linear prediction coefficients; and

a process of obtaining data of second excitation signal from said current data of first excitation signal,

wherein when said first codes are unavailable, said second codes are obtained by directly using speech parameters which are ever decoded in accordance with said first system and are stored.

11. (Currently Amended) The computer program product according to claim 10, wherein said processes further comprising:

a process of generating a first speech signal by driving a filter having any of first linear prediction coefficients derived from said current data of first linear prediction coefficients and second linear prediction coefficients derived from said data of second linear prediction coefficients by using a first excitation signal derived from said current data of first excitation signal; and

a process of obtaining data of second excitation signal from said first speech signal and any of said first linear prediction coefficients and said second linear prediction coefficients.

12. (Currently Amended) The computer program product according to claim 10 ~~or 11~~,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

13. (Cancelled)

14. (New) The method of converting code according to claim 3,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

15. (New) The code conversion apparatus according to claim 7,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

16. (New) The computer program product according to claim 11,

wherein said data of excitation signal includes any of an adaptive codebook data, a fixed codebook data and a gain data.

REMARKS

Claims 1-16 are now pending in the application. Claims 1, 5, 9, and 13 have been cancelled previously by Amendment under International Article 34. Claims 2, 3, 4, 6, 7, 8, 10, 11, and 12, have been amended to eliminate multiply dependent claims and to better conform with US practice and claims 14-16 have been added.

Respectfully submitted,

Michael E. Whitham
Registration No. 32,635

Whitham, Curtis & Christofferson, PC
11491 Sunset Hills Road, Suite 340
Reston, Virginia 20190
703-787-9400

CUSTOMER NUMBER 30743